

Today's Topics:

2 meter or 220 MHz

ARRL PFB 48

Interesting wire story on spectrum management

Modifying radios for out of band operation (2 msgs)

Modifying Radios for out of band use

To QSL or not to QSL...

What about for us SWL's ? Re: Tuning dipoles and antennas.

Date: 8 Dec 89 17:57:20 GMT

From: cs.utexas.edu!usc!orion.oac.uci.edu!uci-ics!turner@tut.cis.ohio-state.edu
(Clark Turner)

Subject: 2 meter or 220 MHz

Message-ID: <257FF601.4484@paris.ics.uci.edu>

In article <8912080828.AA01576@ucbvax.Berkeley.EDU> CSMSCST@OAC.UCLA.EDU (Chris Thomas) writes:

>>Well I finally got around to passing the code and am waiting for the good ol'
>> FCC to send me the Novice license. I am definetly going to go for the Tech.
>.....

>Congratulations, and welcome to the club! You don't say
>whether you want to operate in the L.A. area, or somewhere
>else. The particular location has a lot to do with what's
>.....

>So: 2m is always a safe bet. 220 is interesting, but is
>nearly unused in many areas. My experience with 440 is,
>it's only useful if some group you want to join already uses
>440. The best solution would be a 2m/220 dual bander, but
>/Chris Thomas - WA6HTJ (AA6S-something if the FCC ever sends me
> *my* new ticket)
>.....

WELCOME to the radio.

Just a side note to what Chris says...I bought a Yaesu dual bander for 2m/70cm (144mHz/440mHz) and I find the 440 band to be very interesting. There are only 6 open repeaters I can use from Orange County, it's true, but the company is of high quality and the propogation characteristics are really different from 2 meters. I have not joined any private club yet, but I still find 440 to be worthwhile. I am looking for a way to get on 220, which I understand is also an interesting band. And, don't forget, if you have the money (or the determination to do it), there's always satellite work!

Hope to meet you on the radio someday.

73

Clark, WA3JPG

Date: 8 Dec 89 01:13:40 GMT
From: hpl-opus!hpnmdla!alanb@hplabs.hp.com (Alan Bloom)
Subject: ARRL PFB 48
Message-ID: <1250093@hpnmdla.HP.COM>

The reason you can't work close-in stations on 10 meters is that they are in the "skip zone".

Have you ever noticed that when you look straight down into a pool of water you can see the bottom, but when you crouch down and look nearly parallel to the water surface, it looks like a mirror? The ionosphere acts the same way to radio waves -- signals that propagate straight up go right on through into outer space, while signals radiated at a lower angle can be reflected.

If you think about it, closer stations require a higher radiation angle. Theoretically, to work someone a block away via the ionosphere, you have to transmit almost straight up. Actually ground wave (non-ionosphere) works for very short distances (tens of miles), but distances from, say, 100 to perhaps 1000 or 2000 miles are in the skip zone.

On lower frequencies, the ionosphere is a better reflector so the skip zone is smaller or non-existent.

I don't know why impulse noise is called static!

Al N1AL

Date: 8 Dec 89 18:52:20 GMT
From: zephyr.ens.tek.com!tekcr1!tekgvs!jans@uunet.uu.net (Jan Steinman)
Subject: Interesting wire story on spectrum management
Message-ID: <6484@tekgvs.LABS.TEK.COM>

<Study of Frequency Allocation System Launched... She [head of the Commerce Department agency, Janice Obuchowski] said she favored auctions of spectrum for new commercial licenses or leases, in much the same way the government leases public land for grazing or oil exploration.>

Now wouldn't that make for strange bedfellows -- hams and environmentalists! Hams have been a pretty conservative lot, and I've had some interesting arguments on, for instance, Federal timber sales. Looks like the shoe is on the other foot now!

"Where's John Doe going to get the wood for his house?" "Where's Jane Doe going to get the spectrum for her HDTV"

Jan Steinman - N7JDB
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Date: 8 Dec 89 17:27:14 GMT
From: tank!cps3xx!usenet@handies.ucar.edu (Usenet file owner)
Subject: Modifiying radios for out of band operation
Message-ID: <5724@cps3xx.UUCP>

In article <31093@iuvax.cs.indiana.edu> amirza@silver.bacs.indiana.edu (anmar mirza) writes:

>I have made the mods that Frank discussed to my 2-GAT for extended
>transmit operation.
>I work at an ambulance service, and am a volunteer with a local
>group who participate in cave rescue, and when there is a rescue,
>it is very important to be able to coordinate communications with
>the various agencies involved, and it is VERY impractical to have
>to carry three or four different radios for similar frequencies,
>the logistics for coordination of batteries, antennas, whatever,
>can be very complicated, why not be able to have one radio do all
>that thereby speeding up communications in the emergency situations,
>which can not only help save the patient, but maybe also the rescuers.

Because it is illegal. If you don't agree with the law, then you must decide to: (1) try to change the law through legal means, (2) be civilly disobediant, or (3) abide by the law, (or some combination of the above). You can do what you want, but I reserve option (2) for cases where I feel significant moral issues are involved, like slavery, civil rights, and abortion to name a few. I personally wouldn't exercise civil disobediance over this issue, but you have to make your own decisions.

Note, that you can exercise option (3) quite easily by purchasing a type accepted radio that operates on the frequencies you want to use, including the amateur frequencies.

>Anmar N9ISY

In the rare case that original ideas are found here, I am responsible.
Internet: kjh@usc.edu

Kenneth J. Hendrickson N8DGN
Owen W328, E. Lansing, MI 48825
UUCP: ...!uunet!usc!pollux!kjh

Date: 8 Dec 89 19:30:08 GMT
From: att!cbnewsm!mhgki!rma@ucbvax.Berkeley.EDU (atkins, robert m)
Subject: Modifiying radios for out of band operation
Message-ID: <7425@cbnewsm.ATT.COM>

In article <798@rsiatl.UUCP>, jgd@rsiatl.UUCP (John G. De Armond) writes:

>
> Next, commercial and Public service. The law specifically permits the
> use of ANY communications mode to mitigate a life-threatening situation.
> I'll let you find the paragraph; it's been posted here before. Maybe
> while you're looking, you'll read some of the other interesting paragraphs.
> That means I can use any radio on any frequency if sufficient danger
> exists. What is sufficient danger? I think each ham has to determine that
> himself and be prepared to defend his actions. Certainly dialing over
> to the local police dispatch frequency to report a car wreck is
> inappropriate and could not be defended. On the other hand, if I come
> up on a car wreck and find a victim bleeding or perhaps with a broken
> neck, and I cannot find a ham repeater with patch, you bet yer ass I'm
> going to get on the police frequency call out a unit. Anyone who would
> not should be prosecuted for negligence in my book. I'll gladly
> take any heat forthcomming after the fact. I'd bet the bank on there
> not being any.

>
> Yes, I modify my radios (or build them from scratch) to work adjacent
> commercial/public service bands "just in case" for the exact same
> reason I have emergency power - Just in case. I consider it at least
> reckless to have the ability to mitigate an emergency and not do so.

>
John,

I agree with most of what you said in your posting, and we can certainly modify out radios in any way we see fit for ham use as signal generators or transverter drivers etc. With reference to the quote from your posting above, certainly transmitting out of band in an emergency as you describe would not just be OK, but indeeed it would be moraly indefensible not to do it. Since this is no longer ham radio, it follows that the same would apply to any member of the general public. Therefore it wpould be a good idea if every motorist, indeed everyone in the country, carried a transmiiter capable of operation on police/fire/ambulance/ham/CB frequencies in case they came on a similar situation. Can you see the potential for chaos? A better solution would be a nationwide emergency frequency (similar to the FAA scheme) open to all for use and monitored by all police/fire/emergency services. Please note I don't disagree with most of what you said. I have been in the situation of being first on the scene at a road accident (in rural NH) and having no way of requesting emergency services - I would have transmitted on any frequency to get them. My only point is that hams have no "extra" rights when it comes to out of band transmissions, if its OK for you to have the equipment then its

OK for everyone, and that's a situation I wouldn't want to see. The potential for abuse is great, it would only take a few irresponsible individuals to disrupt emergency service traffic. There must be a better way to achieve your ends.

73, Bob Atkins.

Date: 8 Dec 89 17:49:33 GMT
From: att!cbnewsh!wa2sff@ucbvax.Berkeley.EDU (joseph.e.wilkes)
Subject: Modifying Radios for out of band use
Message-ID: <6455@cbnewsh.ATT.COM>

I have modified my Kenwood TS-140 to transmit out of band.
I did it for the express purpose of using it with
2 meter and 6 meter transverters that I am building.

28-32 MHz gives 50- 54 for the 6 meter transverter
28-32 MHz gives 144-148 for the 2 meter transverter.

I also plan to build similar transverters for 220 MHz and 432 MHz.

If that is not a legitimate reason to modify the radio
I can't think of any better one.

I have not modified by TH215, TH25, IC228H or IC3210A for out of
band use but do have plans to get on 220 FM with a transverter
so might modify it in the future.

If I ban all radios that work out of band then I have trouble
with all radios made recently.
Take almost any 2 meter FM radio, set the off-set for +600 kHz
and select a frequency above 147.4. It will probably transmit.

My stock TS140 transmits on 10.000 MHz, 14.450 MHz, 29.701 MHz, etc.
Even my old Drake T4 would transmit out of band if I didn't set the
VFO correctly.

Novices and Technicians can't have any low band equipment that offers
coverage other than their band segments.

Same for Generals and Advanced.

Only Extras can own short wave radios and only if they don't transmit
out of the edge of the Ham bands.

Crystal Control for everyone. Must show license to buy crystal.

PS.

Has any one upgraded their TS-140 to operate on 6 meters
by adding the additional VCO and 6 meter power amplifier?

Joe Wilkes
att!hound!wa2sff

Date: Fri, 8 Dec 89 14:30:47 CST
From: dube@cpdvax.csc.ti.com (DUBE TODD)
Subject: To QSL or not to QSL...
Message-ID: <8912082032.AA28525@ti.com>

A good bit of my original posting got chopped off, so here's the "rest of the story":

I received a reply from one of the Hams I'd had a QSO with in December 1956. It was a very nice letter recounting some of the equipment and methods we'd used back then. He even enclosed a copy of my QSL card I'd sent. I was surprised to find that I'd completely forgotten what it looked like. But it did give me one of those comfortable "warm feelings" you sometimes get when you remember the pleasant times.

Yes, I still QSL 100 Pct. I think it is one of the courtesies that comes with the PRIVILEGE of enjoying Ham Radio. And if I went to Podunk Island to work DX, I'd be sure to include the QSL's in my budget.

Happy Hamming!
Dube Todd, N5PDK

Date: 6 Dec 89 22:08:47 GMT
From: hpl-opus!hpnmdla!alanb@hplabs.hp.com (Alan Bloom)
Subject: What about for us SWL's ? Re: Tuning dipoles and antennas.
Message-ID: <1250092@hpnmdla.HP.COM>

Antennas are reciprocal -- that is the radiation pattern (directivity), and efficiency are the same for receiving and transmitting. If, for example, the transmitting antenna is down 6 dB in a certain direction on a certain frequency (compared to a resonant dipole), then so will be the antenna when used for receiving.

BUT. It turn out you don't care as much for a receiving antenna. If you lose 6 dB from your transmitter, that's like transmitting only 1/4th the power. In a receiver, however, you are generally limited by atmospheric noise. If the antenna is down 6 dB, BOTH the signal

AND the noise are reduced so that received signal-to-noise ratio
is the same.

Receivers do benefit from antenna directivity (reduction of interference),
but don't worry about efficiency or SWR (impedance matching), it almost
never makes any difference.

A1 N1AL

End of INFO-HAMS Digest V89 Issue #993
